

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

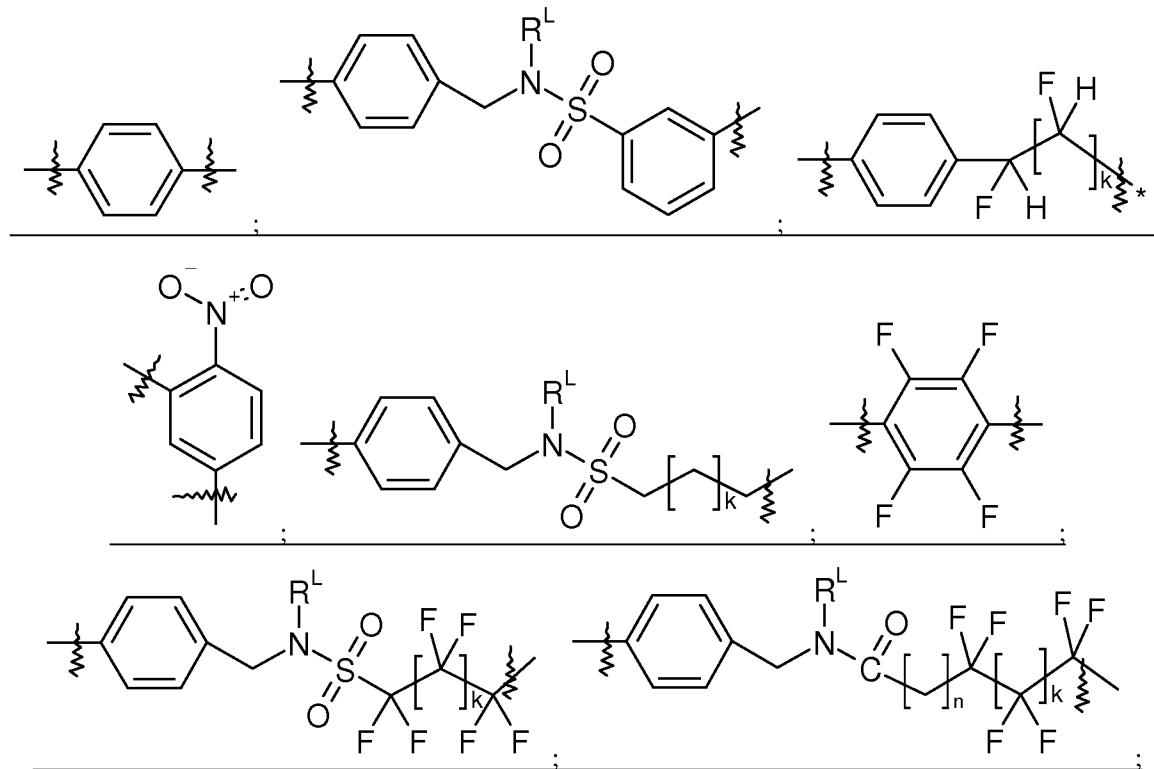
Claims 1 –3 (Cancelled).

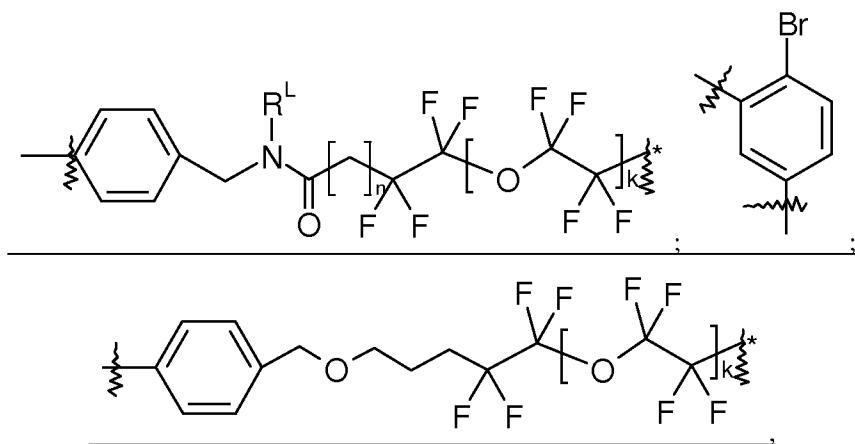
4. (Currently Amended) A process for the production of an ^{18}F -labelled tracer which comprises treatment of a solid support-bound precursor of formula (Ib)

SOLID SUPPORT-LINKER- I^+ -TRACER (Ib)

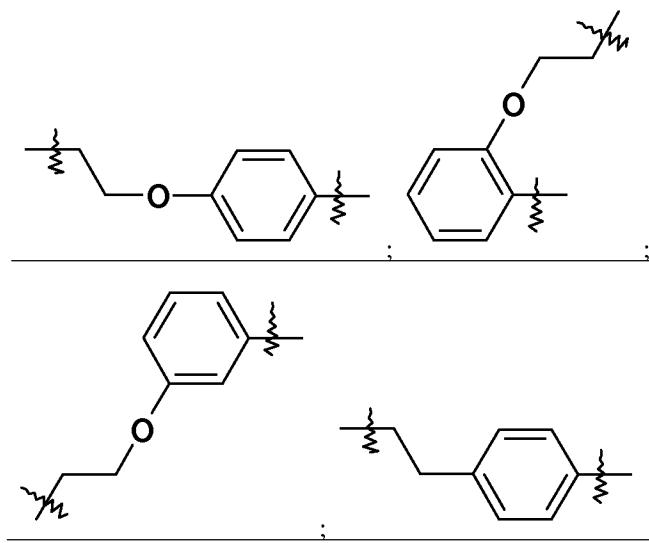
Y^-

wherein Y^- is an anion, the SOLID SUPPORT is a polymer selected from polystyrene which is optionally block grafted, polyacrylamide, and polypropylene or glass or silicon coated with such a polymer, the LINKER is selected from:

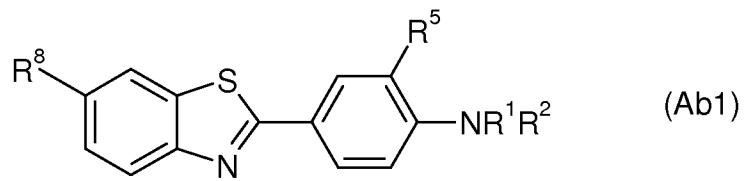




wherein at each occurrence, k is an integer of 0 to 3, n is an integer of 1 to 16, and R^L is hydrogen or C₁₋₆alkyl; and



wherein each phenyl ring is optionally substituted by 1 to 4 groups selected from C₁₋₆alkyl and C₁₋₆alkoxy; and the TRACER is of formula (Ab1)



wherein:

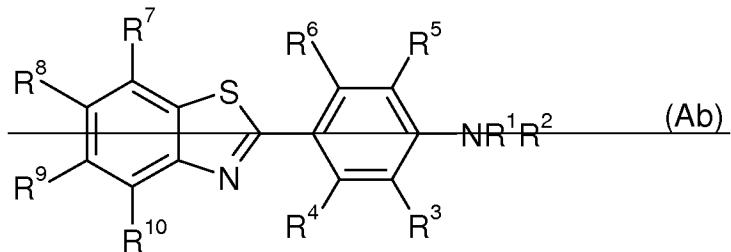
R¹ and R² are independently selected from hydrogen, C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, C₁₋₆ haloalkyl, and a protecting group selected from alkoxy carbonyl;

R⁵ is hydrogen, C₁₋₆ alkyl, or a bond to the SOLID SUPPORT-LINKER-I⁺- group in formula (Ib);

R⁸ is hydroxy, C₁₋₆ alkoxy, C₁₋₆ haloalkyl, C₁₋₆ alkyl, or a bond to the SOLID SUPPORT-LINKER-I⁺- group in formula (Ib);

provided that only one of R⁵ and R⁸ is a bond to the SOLID SUPPORT-LINKER-I⁺- group in formula (Ib);

(Ab)



wherein:

R¹ and R² are independently selected from hydrogen, a protecting group, C₁₋₆ alkyl, C₁₋₆ hydroxyalkyl, and C₁₋₆ haloalkyl;

one of R³ to R¹⁰ is a bond to the SOLID SUPPORT-LINKER-I⁺- group in formula (Ib) and the others are independently selected from hydrogen, halo, C₁₋₆ alkyl, C₁₋₆ haloalkyl, C₁₋₆ hydroxyalkyl, C₁₋₆ alkoxy, C₁₋₆ haloalkoxy, hydroxy, cyano, and nitro;

with ¹⁸F⁻ to produce the labelled tracer of formula (IIb)

¹⁸F-TRACER (IIb)

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Reply to Office action of November 20, 2009

wherein the TRACER is as defined for the compound of formula (Ib) except that one of R⁵ and R⁸R³-to-R¹⁰ is a bond to the ¹⁸F instead of a bond to the SOLID SUPPORT-LINKER-I⁺-group in formula (Ib);

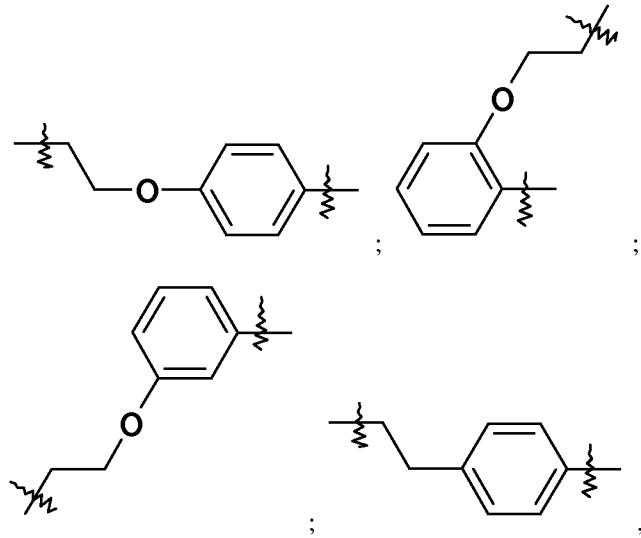
optionally followed by:

- (i) removal of excess ¹⁸F⁻, ~~for example by ion-exchange chromatography~~; and/or
- (ii) removal of any protecting groups; and/or
- (iii) removal of organic solvent; and/or
- (iv) formulation of the resultant compound labelled tracer of formula (IIb) as an aqueous solution.

5. (Cancelled).

Claims 6-14 (cancelled).

15. (New) A process according to claim 4 wherein the LINKER is selected from:



wherein each phenyl ring is optionally substituted by 1 to 4 groups selected from C₁₋₆alkyl and C₁₋₆alkoxy.